

Notice of Allowability

Application No.

09/988,707

Examiner

Todd Ingberg

Applicant(s)

KIM ET AL.

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/20/2001.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ The drawings filed on 20 November 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/20/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

UPDATING A DEVICE DRIVER WITH MECHANISM EMPLOYING TWO FILES ONE CONTAINING CHANGES (VARIABLE FILE) AND A FILE CONTAINING UNCHANGED CODE (INVARIABLE FILE) DOWNLOADING BOTH TO UPDATE

REASONS FOR ALLOWANCE

Outline of Reasons For Allowance

- I. Formal Matters
- II. Enablement and Statutory Considerations
- III. Allowable Subject Matter
- IV. Closest Prior Art of Record
- V. Patch Technology and Dynamic Link Libraries

I. Formal Matters

Information Disclosure Statement

2. The Information Disclosure Statement filed of November 20, 2001 has been considered in part. Several of the references are in foreign languages. If Applicant would like the foreign references considered a certified translation must be submitted.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

4. It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56. Applicant has elected to select a portion of 37 CFR 1.56 (only 1.56(a)). The Declaration is defective. A new declaration is required.

II. Enablement and Statutory Considerations

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A. Initially, the question of how to install two files (variable file and invariable) was thought to be an enablement issue. However, installing software to a device driver would contain an address and offset to ensure proper installation. Unlike, application programs which can grow with time a standardized device driver will have a standard layout where the address of segments is well documented such as Virtual Device Driver as defined by Burke Dictionary below:

Virtual Device Driver

<operating system> (VxD) A device driver under Windows 3.x/Windows 95 running as part of the kernel and thus having access to the memory of the kernel and all running processes as well as raw access to the hardware. VxD's usually have the filename extension .386 under Windows 3.x and .vxd under Windows 95. VxD's written for Windows 3.x can be used under Windows 95 but not vice versa. (27 Feb 1997)

This standard layout is one solution for updating from two separate files.

B. The claims are found to be statutory under 35 U.S.C. 101 because files are inherently written to a computer readable medium and an installation process over a network is inherently executed.

III. Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance:

Specifically, the Applicant claims in all independent claims the creation of two separate files and the downloading of both files to update a device driver. One file being termed the variable file which contains the updates and the invariable file which contains the unchanged code. These limitations were not found singularly or in combination. The independent claims are listed below.

Claim 1

A system for upgrading a device driver of a computer through a network, comprising: an upgrade server dividing at least one device driver to be upgraded into a variable file and an invariable file information according to an upgrade version, and supplying said variable file and said invariable file information through said network; and a computer including an upgrading program installed, said computer downloading said variable file and said invariable file information from said

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upgrade server and upgrading said device driver with said variable file based on said invariable file information.

Claim 12

A method for upgrading a device driver of a computer through a network, comprising the steps of: generating a variable file by extracting parts being different between an old version and a new version of said device driver, and an invariable file information by extracting parts being the same between said old version and said new version of said device driver; storing at least one device driver having said variable file and said invariable file information in an upgrade server; downloading said variable file and said invariable file information from said upgrade server to said computer; and upgrading said device driver of said computer to said variable file based on said invariable file information.

Claim 19

A method, comprising the steps of: generating a variable file by extracting parts being different between an old version and a new version of a device driver, and an invariable file information by extracting parts being the same between said old version and said new version of said device driver; storing said variable file and said invariable file information; downloading said variable file and said invariable file information to said computer from storage; and upgrading said device driver of said computer to said variable file based on said invariable file information.

IV. Closest Prior Art of Record

The two US Patents which are the closest prior art are Gase et al USPN #5,580,177 and Stupek, Jr, et al, USPN # 5,809,287.

A. Gase et al USPN #5,580,177

Gase on column 4 lines 10 – 15 teaches a separate area for printer administration utilities and updated version of printer utility. This is not what has changed. They are two separate utilities.

B. Stupek, Jr, et al, USPN # 5,809,287.

Stupek in the Abstract teaches upgrade information may be stored on a portable medium along with copies of resources and the upgrade information may include instructions, in accordance with a predefined common syntax, for installing each of the resources. This too fails to be a separation of what has changed and what has not changed.

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V. Patch Technology and Dynamic Link Libraries

Patch technology typically only creates a file for what has changed (patch list). A well known patch technology is the use of a Dynamic Link Library (DLL). The text book Beginning Visual C++ 5 made of record illustrates the use of DLLs in Chapter 18. Again, this is only what has changed and is very efficient since only updates are downloaded and installed. The illustrations show how the pointers work with updating a file that the layout (program lookup table) is known.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Todd Ingberg** whose telephone number is (703) 305-9775.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kakali Chaki** can be reached on (703) 305-9662. Please, note that as of August 4, 2003 the **FAX number** changed for the organization where this application or proceeding is assigned is (703) 872-9306.

Also, be advised the United States Patent Office **new address** is

Post Office Box 1450

Alexandria, Virginia 22313-1450

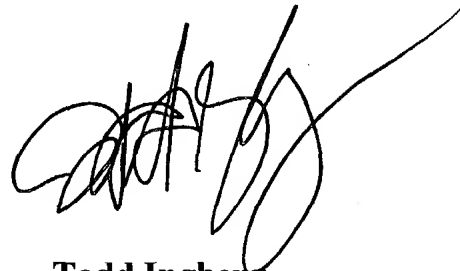
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

Special Notice

7. Please, Note the Examiner's telephone number will change in October when the Art Unit moves to the new location. The Examiner's new telephone number will be as follows:

(571) 272-3723

A handwritten signature in black ink, appearing to read 'Todd Ingberg', with a long horizontal line extending to the right.

Todd Ingberg
Primary Examiner
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September 20, 2004